

In quest for network services virtualization, LineSider won't be sidelined

Analyst: Rachel Chalmers

LineSider Technologies has announced OverDrive. The software automates the provisioning and deployment of network services in cloud computing environments. As resources are moved and changed, policy-driven OverDrive should be able to modify and change the underlying network infrastructure without costly and laborious manual intervention.

The 451 Take

Cloud computing is virtualization plus automation, and while plenty of companies offer good policy-based provisioning and runtime automation at the server tier, far fewer offer comparable functionality for network devices. Yet the network, along with the storage tier, is the Achilles' heel of infrastructure that aspires to cloudiness. By interpreting business policies so they can be automatically enforced, and playing nicely with existing network and configuration management arrangements, LineSider offers a tempting prospect to overworked network administrators who are trying to support private and public clouds.

Context

Privately held LineSider is based in Danvers, Massachusetts, and employs 30 people. Partners include **EMC, Cisco Systems, 3Com, Accenture, Emulex, American Systems Corp** and **BearingPoint**. There are four paying customers for the just-released OverDrive: **GMH Capital Partners, Broadband Access Networking Group**, and partner/customers EMC and American Systems.

Strategy

The company sees enterprises and service providers moving away from static, rigid IT toward more dynamic, fluid infrastructure that is focused on service delivery. The enabling technology is, of course, virtualization, which makes it possible to offer compute resources on demand.

The problem, as LineSider executives see it, is that the network is still static. Every time the compute resources change, the network needs to be configured and provisioned appropriately. Right now, this is most often a manual process.

Technology

LineSider's response is OverDrive 3.0, built to offer real-time automation and control of network services based on business policies. These policies define the relationships between a set of users, a set of compute resources and the network services that connect them.

OverDrive is driven by business policies. It sits between an LDAP directory, a hypervisor adapter and a set of device controllers, and automatically configures the devices based on these business policies. It can manage routing and virtual private networks, switching and VLANs, firewalls and their access control lists, remote access for mobile users and identity-based network access control. Not only can it identify potential conflicts, it can enforce policy compliance.

At OverDrive's core is a Policy Server containing a repository of network services and four engines: one each for correlating services, tracking services, provisioning and workflows. The provisioning engine communicates with routers and switches through a device server controller appliance. Kernel-level support is available for 3Com and select Cisco routers and switches through agents that run directly on the device.

The Policy Server supports SOAP/REST integration APIs for playing nicely with the customer's in-place network management, configuration management and network inventory software. OverDrive offers a portal where administrators can create business policies. A module that was created especially for MSPs allows a single instance of Policy Server to support multiple enterprise customers.

The result is that an administrator with no experience in device-level configuration or network topology can enter a natural language command such as 'give the sales team access to the new CRM server.' OverDrive interprets the policy, identifies which devices and services need to be modified, and then pushes configuration updates to those devices.

The really clever part is that all this should work exactly the same way in the cloud, whether that cloud is a set of private resources on Cisco's Unified Computing System or a set of public resources offered by an MSP. The virtual compute capacity might be in one physical location, the storage facility in another and the enterprise end user in still a third. OverDrive creates and enforces policies regardless.

Competition

The closest parallel to LineSider is **Hewlett-Packard's** Network Automation software, based on **Opsware's** acquisition of **Provision Networks**. The HP software discovers and tracks configuration changes, audits posture and enforces policies. Further afield, LineSider abuts two markets: I/O virtualization in the shape of something like **Scalent Systems**, and policy-driven VM automation in the shape of **DynamicOps**, **Embotics**, **Fortisphere**, **Hyper9**, **ManageIQ**, **Reductive Labs**, **Reflex Systems** and **Surgient**.

SWOT analysis

Strengths

We like a startup coming out of the gate with four paying customers and a handful of strong technology partnerships. To these assets, LineSider adds a lucid vision and a sensible product architecture.

Weaknesses

As cloud computing gathers momentum, the network automation problem is seldom viewed in isolation from the server and storage automation issues. It's nice that LineSider integrates with tools at other layers in the stack, but a comprehensive approach to automation would include all three.

Opportunities

Every end-user organization we talk to finds their plans turning to automation the second they have mastered virtualization. The network, along with the storage tier, emerges as a critical pain point for enterprises.

Threats

HP is not a competitor to be trifled with. The company gambled hugely on its Opsware acquisition, and its automation portfolio is a key part of its competitive arsenal versus IBM.

Reproduced by permission of The 451 Group; copyright 2009. This report was originally published within The 451 Group's Market Insight Service.

For additional information on The 451 Group or to apply for trial access, go to:
www.the451group.com